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SCHWARTZ, JORDAN MARC				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/597,537

**Applicant(s)**

HENDRIKS ET AL.

**Examiner**

Jordan M. Schwartz

**Art Unit**

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

Claims 10 and 19 (and respective dependent claims 11, 13-18 and 20) are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The use of electrodes to apply a voltage for varying the shape of the meniscus in dependence of the applied voltage is critical or essential to the practice of the invention but not included in these claims is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Specifically, throughout the specification, applicant states that the meniscus shape is being varied by the use of electrodes to apply a voltage. The specification does not disclose how this variation of the meniscus shape can be made without the use of electrodes. Additionally, the claimed "when no voltage is applied" lacks an antecedent basis since applicant has not claimed a voltage and has not claimed electrodes to apply a voltage. Therefore the use of electrodes to apply a voltage for varying the shape of the meniscus in dependence of the applied voltage is critical or essential to the practice of the invention and has not been claimed within these rejected claims. For purposes of examination the assumed meaning is that this limitation is within the independent claims 10 and 19 (and therefore claim 12 would then not be further limiting).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 10 and 12-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuiper et al publication number 2006/0028734.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Kuiper'734 reads on these claims by disclosing the limitations therein including the following: an optical system comprising a first lens group (Figure 7, all of the elements and fluids on the object side from element "72" to and including the stop "80" or Figure 8, paragraph 0085, the same comparable elements as the first lens group); a second lens group (Figure 7, all of the elements and fluids on the image side of the stop "80" or figure 8, paragraph 0085, the same comparable elements); and a stop (Figure 7, "80", figure 8, paragraph 0085 re that the figure 8 embodiment is similar to that of figure 7 embodiment with the exception of the shape of the entrance and exit elements); a chamber having an entrance and an exit window and an optical axis extending

longitudinally through (Figure 7, paragraph 0083, element "72" as the "entrance window" and element "78" as the exit window and figure 8 with the same elements as the entrance and exit windows); the chamber comprising first and second fluids in contact over a meniscus extending transverse the optical axis and the fluids being immiscible (Figure 7, paragraphs 0029-0030, 0066, 0083-0085, fluids "B" as the "first fluid" and fluid "A" as the "second fluid" and figure 7, interface "64" as the meniscus and figure 8, interface "63" as the meniscus); the chamber further comprising electrodes to vary the shape of the meniscus depending on the voltage (paragraph 0071); the entrance window comprising a surface in contact with the first fluid (figures 7 and 8, the image side surface of element "72" in contact with fluid B re "in contact with the first fluid"); this surface of the entrance window having a curvature (Figures 7 and 8, the image side surface of element "72"); the curvature of this surface having the same sign as the curvature of the meniscus when no voltage is applied (figure 7, the curvature of the image side surface of element "72" having the same sign as meniscus "64" or figure 8, the curvature of the image side surface of element "72" having the same sign as the meniscus "63"); one of the windows made of a material having a substantially different Abbe number than the contacting fluid (paragraphs 0003, 0066 which discloses lenses "72" and "74" as glass or plastic and fluid "B" as an aqueous salt solution); the first lens group on the object side and comprising a chamber, the second lens group on the image side and a stop between (Figures 7 and 8 and paragraph 0085); the stop attached to the first lens group at the side of the image space (Figure 7 and Figure 8, paragraph 0085); the stop integrated in the first lens group (Figure 7 with the stop and

all liquids and elements on the object side of it being considered as the "first lens group" and Figure 8, paragraph 0085); an optical device comprising the lens system and specifically a mobile phone (paragraph 0004, figure 19).

Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Tsuboi et al publication number 2001/0017985.

Tsuboi reads on this claim by disclosing the limitations therein including the following: an optical lens system (abstract, figure 10A); a first lens having a chamber filled having an entrance and an exit window (the lens element of Figure 10A as the "first lens", paragraphs 0082-0086 and figures 7A and 10, the part of container "7" in contact with fluid 8 of figure 10A as the entrance window and the part of container "7" in contact with fluid 9 of figure 10A as the exit window); the chamber comprising first and second fluids in contact over a meniscus, the fluids being immiscible (abstract, paragraphs 0082-0086, Figures 7a and 10A, fluids 8 and 9); the chamber further comprising electrodes to vary the shape of the meniscus depending on the voltage (paragraphs 0082-0086); a contact surface the entrance window comprising a surface in contact with one of the fluids with the surface having a curvature (Figures 10A, the part of container "7" in contact with fluid 8 of figure 10A as the entrance window and disclosed in figure 10A as having a curvature); the curvature of the entrance window having the same sign as that of the meniscus when no voltage is applied (figure 10A, the curvature of the surface of the container "7" in contact with fluid 8 having the same sign of curvature as the meniscus between fluids 8 and 9).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuboi et al publication number 2001/0017985.

Tsuboi discloses the limitations therein including the following: an optical system comprising a first lens group (Figure 11, group "1"); a second lens group (Figure 11, group 2); having a chamber filled having an entrance and an exit window and an optical axis extending longitudinally through (Figures 7 and 10, paragraphs 0082-0086, the part of container "7" in contact with fluid 8 of figure 10A as the entrance window and the part of container "7" in contact with fluid 9 of figure 10A as the exit window); the chamber comprising first and second fluids in contact over a meniscus extending transverse the optical axis and the fluids being immiscible (abstract, paragraphs 0082-0086, Figures 7 and 10, fluids 8 and 9); the chamber further comprising electrodes to vary the shape of the meniscus depending on the voltage (paragraphs 0082-0086); the entrance window comprising a surface in contact with one of the fluids with the surface having a curvature (Figures 10A and 11A, the part of container "7" in contact with fluid 8 of figure 10A as the entrance window and disclosed in figure 10A as having a curvature); the curvature of the entrance window having the same sign as that of the meniscus when no voltage is applied (figure 10A, the curvature of the surface of the container "7" in contact with fluid 8 having the same sign of curvature as the meniscus between fluids 8 and 9); one

of the windows made of a material having a substantially different Abbe number than the contacting fluid (paragraph 0044, 0048-0049); the first lens group on the object side and comprising a chamber, the second lens group on the image side (Figure 11); an optical device comprising the lens system (paragraph 0004); and an optical device comprising the optical lens system (abstract).

Tsuboi discloses as is set forth above including disclosing the lens system as a plus, minus zoom lens system (Figure 11) but does not specifically disclose the system comprising a stop and further with the stop between the first and second lens groups integrated with the first group. However, the examiner takes Judicial Notice that it is well known in the art of zoom lens systems, such as plus, minus zoom lens systems to incorporate an aperture stop within the system such as either on the object side of the system or between the lens groups and integrated with the first lens group for the purpose of providing the required light limiting. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the plus minus zoom lens system of Tsuboi as further comprising an aperture stop either on the object side of the system or between the first and second lens groups integrated with the first group since it is well known in the art of zoom lens systems, such as plus, minus zoom lens systems to incorporate an aperture stop within the system such as either on the object side of the system or between the lens groups and integrated with the first lens group for the purpose of providing the required light limiting. Furthermore the examiner takes Judicial Notice that minus plus zoom lens systems are well known systems in mobile phones for the purpose of providing mobile phones of improved

imaging. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the optical device of Tsuboi as a mobile phone since it is well known in the art of zoom lens systems to have a minus plus system within a mobile phone for the purpose of providing mobile phones of improved imaging.

***Examiner's Comments***

Okada et al patent number 5,153,777 and Enomoto patent number 6,922,290 were previously cited and are being cited again as evidence of the examiner's Judicial Notice that it is well known in the art of zoom lens systems, such as plus, minus zoom lens systems to incorporate an aperture stop within the system such as either on the object side of the system or between the lens groups and integrated with the first lens group for the purpose of providing the required light limiting. Kaneko patent number 6,836,376 was previously cited and is being cited again as evidence of the examiner's Judicial Notice that minus plus zoom lens systems are well known systems in mobile phones for the purpose of providing mobile phones of improved imaging.

***Examiner's Comments***

For applicant's information, Takayama 7,043,153 and Nagaoka et al patent number 6,934,090 do not qualify as prior art based upon applicant's foreign priority. Specifically, applicant is entitled to the benefit of the foreign priority date of EP 04100947.3 which fully supports the claims, is in compliance with the requirements of 35 USC 119 and was filed in English and therefore does not require a certified translation to be perfected.

***Response to Arguments***

Applicant's arguments filed February 3, 2009 with respect to the rejections above have been fully considered but they are not persuasive. With respect to the Kuiper reference, applicant argues that the independent claims require the entrance window having a surface in contact with the first liquid to have the same sign as the meniscus. Applicant argues that in figure 7 of Kuiper the surface of element 72 in contact with fluid B has the opposite sign of the curvature of meniscus 63. However, applicant is broadly claiming a meniscus between the differing fluids. There are numerous menisci between differing fluids in the figure 7 embodiment of Kuiper. As stated in the rejection above, the examiner has considered meniscus 64 as the claimed meniscus. This meniscus has the same sign as the surface of element 72 in contact with the fluid B thereby reading on this limitation. Additionally, the figure 8 embodiment also reads on these claims as per the rejection above. Specifically, the meniscus 63 has the same sign as the surface of element 72 in contact with the fluid B since in this embodiment element 72 is a meniscus element concave to the object side. In the prior office action, the examiner had also made a rejection with the Tsuboi reference. This rejection was not addressed by applicant and is still applicable as per the rejections above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number is 571-272-2337. The examiner can normally be reached on Monday to Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jordan M. Schwartz  
Primary Examiner  
Art Unit 2873  
April 6, 2009

/Jordan M. Schwartz/  
Primary Examiner, Art Unit 2873